

**THAT WHICH IS CLAIMED IS:**

1. A method of reducing the glycemic index in a patient suffering type 2 diabetes or abnormally high blood glucose levels, said method comprising the step of including in the diet of said patient a glycemic index reducing amount of a food composition containing at least 0.01 wgt % of propylene glycol alginate.
2. A method of reducing the glycemic index in a patient suffering type 2 diabetes, said method comprising the step of including in the diet of said patient a glycemic index reducing amount of a food composition containing at least 0.01 wgt % of glycerol, sugar alcohol, starch hydrolysate, corn syrup, dextrose syrup, glycerol monostearate, sodium stearyl lactylate, D-glucose 3-stearate, methyl alpha-D-glucoside 6-stearate, sucrose monostearate, sorbitan tetrastearate, stearyl-2-lactylate, sodium stearyl fumarate, polyoxyethylene stearate, and stearyl monoglyceride citrate.
3. A method for providing nutrition to a diabetic patient while substantially reducing said patient's blood glucose level, said method comprising the step of enterally administering to the patient a meal comprising a blood glucose level reducing amount of a food composition comprising at least 0.01 weight percent propylene glycol alginate.
4. A method for substantially reducing the blood glucose level in a person, said method comprising the step of enterally administering to the person a food composition prepared by a method comprising;
  - (a) preparing a food composition consisting of wheat, tapioca, barley, oat, potato, rice or corn flour or mixture thereof, water and at least 0.01 weight percent propylene glycol alginate; and

(b) cooking said food composition by placing in boiling water for a time sufficient to increase the percent weight gain due to hydration relative to a food composition without propylene glycol alginate cooked in boiling water.

5. A method for controlling the membrane structure of a starch granule in a food composition during starch hydrolysis following consumption of said food composition, said method comprising the incorporation into said food composition of an effective amount of an agent selected from the group consisting of glycerol, sugar alcohol, starch hydrolysate, corn syrup, dextrose syrup, propylene glycol alginate, glycerol monostearate, sodium stearyl lactylate, D-glucose 3-stearate, methyl alpha-D-glucoside 6-stearate, sucrose monostearate, sorbitan tetrastearate, stearyl-2-lactylate, sodium stearyl fumarate, polyoxyethylene stearate, and stearyl monoglyceride citrate.

6. The method of claim 5 wherein the agent is selected from the group consisting of propylene glycol alginate, glycerol monostearate, sodium stearyl lactylate, D-glucose 3-stearate, methyl alpha-D-glucoside 6-stearate, sucrose monostearate, sorbitan tetrastearate, stearyl-2-lactylate, sodium stearyl fumarate, polyoxyethylene stearate, and stearyl monoglyceride citrate.

7. A meal for a patient with type 2 diabetes or abnormally high blood glucose levels comprising a starch-containing food and an amount of propylene glycol alginate equal to or greater than 0.01 weight percent of said starch-containing food.

8. A meal for a patient with type 2 diabetes or abnormally high blood glucose levels comprising a starch-containing food and an amount of an agent selected from the group consisting of glycerol, sugar alcohol, starch hydrolysate, corn syrup, dextrose syrup, propylene glycol alginate, glycerol monostearate, sodium stearyl lactylate, D-glucose 3-stearate, methyl alpha-D-glucoside 6-stearate, sucrose monostearate, sorbitan tetrastearate, stearyl-2-lactylate, sodium

stearoyl fumarate, polyoxyethylene stearate, and stearyl monoglyceride citrate equal to or greater than 0.01 weight percent of said starch-containing food.

9. A meal for a person with type 2 diabetes or an abnormally high blood glucose level comprising a food selected from the group consisting of wheat, tapioca, barley, oat, potato, rice or corn and an amount of propylene glycol alginate equal to or greater than 0.01 weight percent of said food.

10. A food composition, which contains propylene glycol alginate for use in the treatment of diabetes.

11. Use of propylene glycol alginate in the manufacture of a food composition, for use in the treatment of diabetes.

12. A method that controls the glucose release initiated by enzymatic action, said method comprising the step of enterally administering to the patient a meal comprising a blood glucose level reducing amount of a food composition comprising at least 0.01 weight percent propylene glycol alginate.

13. A method for starch cell wall strengthening in a starch-containing food by inclusion in said food of at least one food additive selected from the group consisting of glycerol, sugar alcohol, starch hydrolysate, corn syrup, dextrose syrup, propylene glycol alginate, glycerol monostearate, sodium stearoyl lactylate, D-glucose 3-stearate, methyl alpha-D-glucoside 6-stearate, sucrose monostearate, sorbitan tetrastearate, stearyl-2-lactylate, sodium stearoyl fumarate, polyoxyethylene stearate, and stearyl monoglyceride citrate in an amount equal to or greater than 0.01 weight percent of said starch-containing food.